Maximizing the Durability of Athletic Fields

Durable athletic fields begin with sound construction and careful planning, and good management practices can increase a field's durability. The basic concepts presented here can help field managers extend the usability of athletic fields.

Field managers are asked to maintain premier turf surfaces knowing that the field will be overused and likely not make it through the playing season. Athletic fields are being used to host more and more events and tournaments. The addition of lights is a major reason for this situation. In some cases, new sports such as lacrosse are being added to fields already overburdened with soccer events. Football fields need to double as general purpose fields for special events. Of course, at some point, a field will begin showing signs of wear. And at some point, the field can fail.

Because field wear is influenced by so many variables, no definitive equation exists to predict when a field will begin showing signs of wear or when it will fail. Such a prediction would be invaluable to schools and municipalities as they face increased legal questions and liability issues regarding injuries associated with poorly designed or constructed facilities, and/or mismanaged facilities. Field managers struggle to accommodate all participating groups without damaging the fields. If fields are overused, then the likelihood of a player becoming injured due to poor field conditions increases. What is a field manager to do?

Ideally, adequate numbers of fields would be available so use could be properly distributed. It is best to have specific game and practice fields dedicated only to one sport to eliminate compound wear from two or more sports. Additionally, a sound turf maintenance program promotes turf growth and recovery. Unfortunately, budgets for field management are often the most limiting factor.

Good fields begin with a sound construction strategy, and careful planning is imperative for long-term success.

ENSURE ADEQUATE DRAINAGE

Several construction strategies can maximize field durability. At the top of the list is adequate drainage. Wet fields are more prone to damage than dry fields. Adequate drainage not only prevents rainouts; it can also prolong a field's life. Drainage can be achieved by using surface flow off fields that are crowned or by using subsurface drainage lines. Subsurface drainage depends on good water infiltration of the field. For this reason, a sand-based field will move the water from the field surface much more effectively than relying on surface flow alone. In addition, sand-based fields are less likely to compact. A compacted field generally has lower water infiltration rates, so the surface may remain wet for longer periods of time following a moderate rain.

SELECT A DURABLE TURFGRASS

Bermudagrass is the ideal turfgrass surface for most of North Carolina's athletic fields. The exception may be fields in the upper elevations in

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